

Crop Rotation for the control of Reniform nematodes Summary
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This rotation study, located in a cotton field heavily infested with reniform nematodes near Huxford, AL, was initiated in 2005. The study is designed to examine the beneficial effects of summer non-host crops grown for one or two years between a cotton crop and to determine if the addition of a nematicide to the cotton crop will further increase yield. Non-host crops in this rotation study include soybean, peanut, and corn. Telone was used as the nematicide. This is the first year (2007) that cotton yields following 1- and 2- non-host crop rotations could be evaluated directly. Due to the extreme drought, yields in all treatments were significantly reduced. Cotton following two years with a non-host crop was numerically superior to cotton alternated every other year with a non-host crop (i.e. a 1 year non-host rotation). Cotton yield in both 1- and 2- year rotations was significantly greater than continuous cotton. In contrast to the 2006 test, Telone did not appear to increase cotton yields substantially in 2007.

Table 1. Impact of crop rotation on cotton yields in 2007.

Crops			2007 Seed Cotton Yield lb/acre
2005	2006	2007	
Cotton	Corn	Cotton	1535
Cotton	Peanut	Cotton	1512
Cotton	Soybean	Cotton	1536
Corn	Corn	Cotton	1726
Peanut	Peanut	Cotton	1705
Soybean	Soybean	Cotton	1651
Cotton	Cotton	Cotton	1319
LSD (0.05)			257
Pr>F	Rotation		0.0001
Pr>F	Nematicide		0.5898 NS
Pr>F	Rotation x Nematicide		0.9848 NS